

(I) 100 parts by weight of one or more linear, branched, star-shaped (radial), or multiarm block copolymers or mixtures of two or more such block copolymers, said block copolymers having one or more midblocks, said midblocks comprising one or more substantially crystalline polyethylene midblocks and with (i) one or more amorphous midblocks or (ii) without amorphous midblocks, in combination with or without a selected amount of one or more of

(II) a polymer or copolymer, and selected amounts of

(III) a plasticizing oil sufficient to achieve gel rigidities of from less than about 2 gram Bloom to about 1,800 gram Bloom, with the proviso when said (I) block copolymers without any amorphous midblocks are combined with at least one block copolymer having at least one amorphous midblock, that said midblocks of said (I) block copolymers forming said crystal gel comprises a selected amount of crystallinity sufficient to exhibit a melting endotherm of at least about 40°C as determined by DSC curve.

2. (Once amended) A gel according to claim 1, wherein said (i) block copolymer is poly(styrene-ethylene-butylene-styrene), poly(styrene-ethylene-propylene-styrene), poly(styrene-ethylene-styrene), poly(styrene-butylene-styrene), poly(styrene-ethylene-ethylene/butylene-styrene), poly(styrene-ethylene-ethylene/propylene-styrene), poly(styrene-butylene-ethylene/propylene-styrene), poly(styrene-butylene-ethylene/butylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-styrene), poly(styrene-ethylene-ethylene/butylene-butylene-styrene), poly(styrene-butylene-ethylene/propylene-butylene-styrene), poly(styrene-butylene-ethylene/butylene-butylene-styrene), poly(styrene-ethylene-butylene-ethylene/butylene-styrene), poly(styrene-ethylene-butylene-ethylene/propylene-styrene), poly(styrene-ethylene-ethylene/butylene-ethylene/propylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene/butylene-styrene), poly(styrene-butylene-ethylene/butylene-

ethylene/propylene-styrene), poly(styrene-butylene-ethylene/propylene-ethylene/butylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/butylene-styrene), poly(styrene-ethylene/propylene-butylene-ethylene/propylene-styrene), poly(styrene-butylene-ethylene/butylene-butylene-ethylene/butylene-styrene), poly(styrene-butylene-ethylene/butylene-butylene-ethylene/propylene-styrene), poly(styrene-ethylene-ethylene/butylene-butylene-ethylene/propylene-styrene), poly(styrene-ethylene-ethylene/propylene-butylene-ethylene/propylene-butylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/butylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-ethylene-styrene), poly(styrene-butylene-ethylene/propylene-butylene-ethylene/propylene-butylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/butylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-ethylene-styrene), poly(styrene-ethylene-ethylene/propylene-ethylene/butylene-ethylene/propylene-ethylene/butylene-butylene-styrene), poly(styrene-ethylene-butylene)<sub>n</sub>, poly(styrene-ethylene-propylene)<sub>n</sub>, poly(styrene-ethylene)<sub>n</sub>, poly(styrene-butylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/butylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/propylene)<sub>n</sub>, poly(styrene-butylene-ethylene/propylene)<sub>n</sub>, poly(styrene-butylene-ethylene/butylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/propylene-ethylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/butylene-butylene)<sub>n</sub>, poly(styrene-butylene-ethylene/propylene-butylene)<sub>n</sub>, poly(styrene-butylene-ethylene/butylene-butylene)<sub>n</sub>, poly(styrene-ethylene-butylene-ethylene/butylene)<sub>n</sub>, poly(styrene-ethylene-butylene-ethylene/propylene)<sub>n</sub>, poly(styrene-ethylene/butylene-ethylene/propylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/butylene-ethylene/propylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/propylene-ethylene/butylene)<sub>n</sub>, poly(styrene-butylene-ethylene/butylene-ethylene/propylene)<sub>n</sub>, poly(styrene-butylene-ethylene/propylene-

ethylene/butylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/butylene)<sub>n</sub>, poly(styrene-ethylene/propylene-butylene-ethylene/propylene)<sub>n</sub>, poly(styrene-butylene-ethylene/butylene-butylene-ethylene/butylene)<sub>n</sub>, poly(styrene-butylene-ethylene/butylene-butylene-ethylene/propylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/butylene-butylene-ethylene/propylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/propylene-butylene-ethylene/butylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-ethylene)<sub>n</sub>, poly(styrene-butylene-ethylene/propylene-butylene-ethylene/propylene-butylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/butylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-ethylene/butylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/propylene-ethylene-ethylene/propylene-ethylene)<sub>n</sub>, poly(styrene-ethylene-ethylene/propylene-ethylene/butylene-ethylene/propylene-ethylene/butylene-butylene)<sub>n</sub> or a mixture thereof.

3. (Once amended) A gel according to claim 1 or 8, wherein said gel exhibits in differential scanning calorimeter (DSC) a melting endotherm of about 25°C, 28°C, 29°C, 30°C, 31°C, 32°C, 33°C, 34°C, 35°C, 36°C, 37°C, 38°C, 39°C, 40°C, 41°C, 42°C, 43°C, 44°C, 45°C, 46°C, 47°C, 48°C, 49°C, 50°C, 51°C, 52°C, 53°C, 54°C, 55°C, 56°C, 57°C, 58°C, 59°C, 60°C, 61°C, 62°C, 63°C, 64°C, 65°C, 66°C, 67°C, 68°C, 69°C, 70°C, 71°C, 72°C, 73°C, 74°C, 75°C, 76°C, 77°C, 78°C, 79°C, 80°C, 90°C, 100°C, 110°C, or 120°C.

4. (Once amended) A gel according to claim 1, wherein said selected (v) crystalline or non-crystalline polymer or copolymer is poly(styrene-butadiene-styrene), poly(styrene-butadiene), poly(styrene-isoprene-styrene), poly(styrene-isoprene), poly(styrene-ethylene-propylene), low viscosity poly(styrene-ethylene-propylene-styrene), low viscosity poly(styrene-ethylene-butylene-styrene), poly(styrene-ethylene-butylene), meleated poly(styrene-ethylene-butylene-styrene), high vinyl content poly(styrene-ethylene-butylene-styrene),

poly(styrene-ethylene-propylene-styrene-ethylene-propylene),  
poly(ethylene-propylene), poly(styrene-butadiene)<sub>n</sub>,  
poly(styrene-butadiene)<sub>n</sub>, poly(styrene-isoprene)<sub>n</sub>,  
poly(styrene-isoprene)<sub>n</sub>, poly(styrene-ethylene-propylene)<sub>n</sub>, low  
viscosity poly(styrene-ethylene-propylene)<sub>n</sub>, low viscosity  
poly(styrene-ethylene-butylene)<sub>n</sub>, poly(styrene-ethylene-butylene)<sub>n</sub>,  
meleated poly(styrene-ethylene-butylene)<sub>n</sub>, high vinyl content  
poly(styrene-ethylene-butylene)<sub>n</sub>, poly(styrene-ethylene-propylene-  
styrene-ethylene-propylene)<sub>n</sub>, poly(ethylene-propylene)<sub>n</sub>, polystyrene,  
polybutylene, poly(ethylene-propylene), poly(ethylene-butylene),  
polypropylene, polyethylene, polyphthalamide or polyurethane elastomer  
formed from one or more saturated hydrocarbon diols, wherein said  
selected block copolymer is a linear, branched, multiarm, or star shaped  
copolymer.

5. A gel according to claim 1 or 8, wherein said gel is being denoted  
by G, is physically interlocked with a selected material M  
or in combination with one or more of the same gel or a different gel  
forming a composite of the combination  $G_n G_n$ ,  $G_n G_n G_n$ ,  $G_n M_n$ ,  $G_n M_n G_n$ ,  $M_n G_n M_n$ ,  
 $M_n G_n G_n$ ,  $M_n M_n M_n G_n M_n$ ,  $M_n G_n G_n M_n$ ,  $G_n M_n G_n G_n$ ,  $G_n G_n M_n M_n$ ,  $G_n M_n M_n G_n$ ,  $G_n G_n M_n G_n M_n G_n G_n$ ,  
 $G_n M_n G_n M_n M_n$ ,  $M_n G_n M_n G_n M_n G_n$ ,  $G_n G_n M_n M_n G_n$ ,  $G_n G_n M_n G_n M_n$ ,  $G_n G_n M_n G_n M_n G_n$ ,  $G_n M_n G_n M_n G_n$ ,  
 $M_n M_n M_n G_n$ ,  $M_n M_n M_n G_n M_n M_n M_n$  or a permutation of one or more of said  $G_n$  with  $M_n$ ;  
wherein when n is a subscript of M, n is the same or different selected  
from the group consisting of paper, foam, plastic, fabric, metal, metal  
foil, concrete, wood, glass, glass fibers, ceramics, synthetic resin,  
synthetic fibers or refractory materials; and wherein when n is a  
subscript of G, n denotes the same or a different gel rigidity.

6. (Twice amended) A gel according to claim 1 or 8, wherein said gel  
being formed into a gel hand exercising grip, a gel shape floss suitable  
for use as a dental floss, a gel crutch cushion, a gel cervical pillow,  
a gel bed wedge pillow, a gel leg rest, a gel neck cushion, a gel  
mattress, a gel bed pad, a gel elbow pad, a gel dermal pad, a gel

wheelchair cushion, a gel helmet liner, a gel cold and hot pack, a gel exercise weight belt, a gel traction pad or belt, a gel cushion for splints, a gel sling, a gel brace for the hand, wrist, finger, forearm, knee, leg, clavicle, shoulder, foot, ankle, neck, back, rib, a gel sole for orthopedic shoe, a gel shaped toy article, a gel optical cladding for cushioning optical fibers from bending stresses, a gel swab tip, a gel fishing bate, a gel seal against pressure, a gel thread, a gel strip, a gel yarn, a gel tape, a weaved gel cloth, a gel fabrics, a gel balloon for valvuloplasty of the mitral valve, a gel trointestinal balloon dilator, a gel esophageal balloon dilator, a gel dilating balloon catheter use in coronary angiogram, a gel condom, a gel toy balloon, a gel surgical and examination glove, a self sealing enclosures for splicing electrical and telephone cables and wires, a gel film, or a gel liner.

7. (Twice amended) A gel according to claim 5, wherein said composite being formed into a gel hand exercising grip, a gel shape floss suitable for use as a dental floss, a gel crutch cushion, a gel cervical pillow, a gel bed wedge pillow, a gel leg rest, a gel neck cushion, a gel mattress, a gel bed pad, a gel elbow pad, a gel dermal pad, a gel wheelchair cushion, a gel helmet liner, a gel cold and hot pack, a gel exercise weight belt, a gel traction pad or belt, a gel cushion for splints, a gel sling, a gel brace for the hand, wrist, finger, forearm, knee, leg, clavicle, shoulder, foot, ankle, neck, back, rib, a gel sole for orthopedic shoe, a gel shaped toy article, a gel optical cladding for cushioning optical fibers from bending stresses, a gel swab tip, a gel fishing bate, a gel seal against pressure, a gel thread, a gel strip, a gel yarn, a gel tape, a weaved gel cloth, a gel fabrics, a gel balloon for valvuloplasty of the mitral valve, a gel trointestinal balloon dilator, a gel esophageal balloon dilator, a gel dilating balloon catheter use in coronary angiogram, a gel condom, a gel toy balloon, a gel surgical and examination glove, a self sealing enclosures for splicing electrical and telephone cables and wires, a gel film, or a gel liner.

8. (Thrice amended) An improved gelatinous composition comprising: a crystal gel formed from

(I) 100 parts by weight of one or more of the same block copolymers or mixtures of two or more of a different block copolymers, said block copolymers having the formula  
poly(styrene-ethylene-ethylene-butylene-styrene),  
poly(styrene-ethylene-ethylene-propylene-styrene),  
poly(styrene-ethylene-ethylene-butylene<sub>25</sub>-styrene),  
poly(styrene-ethylene-ethylene-propylene-ethylene-styrene),  
poly(styrene-ethylene-propylene-ethylene-styrene),  
poly(styrene-ethylene-propylene-ethylene-ethylene-propylene-styrene),  
poly(styrene-ethylene-ethylene-butylene)<sub>n</sub>,  
poly(styrene-ethylene-ethylene-propylene)<sub>n</sub>,  
poly(styrene-ethylene-ethylene-butylene<sub>25</sub>)<sub>n</sub>,  
poly(styrene-ethylene-ethylene-propylene-ethylene)<sub>n</sub>,  
poly(styrene-ethylene-propylene-ethylene)<sub>n</sub>,  
poly(styrene-ethylene-propylene-ethylene-ethylene-propylene)<sub>n</sub>,  
midblocks comprising one or more substantially crystalline polyethylene midblock segment(s), wherein subscript n is two or more; wherein said (I) block copolymers in combination with or without a selected amount of one or more of

(II) a polymer or copolymer, and selected amounts of

(III) a plasticizing oil sufficient to achieve a gel rigidity of from less than about 2 gram Bloom to about 1,800 gram Bloom, wherein said gel is capable of exhibiting greater tear resistance or greater fatigue resistance than a gel having a corresponding rigidity made from a substantially amorphous poly(styrene-ethylene-butylene-styrene) or poly(styrene-ethylene-propylene-styrene) block copolymers having substantially non-crystalline polyethylene midblock segments.

9. (Twice amended) A composite of claim 5 shaped in the form of a gel liner for lower limb or above the knee amputee prosthesis formed by injection molding, extruding, spinning, casting, or dipping of said gel, wherein said gel comprises at least one said block copolymer of

poly(styrene-ethylene-ethylene-propylene-styrene), poly(styrene-ethylene-ethylene-propylene)<sub>n</sub>, poly(styrene-ethylene-ethylene-butylene-styrene), or poly(styrene-ethylene-ethylene-butylene)<sub>n</sub> or a mixture of two or more of said block copolymers.

10. (Twice amended) A gel of claim 3 shaped in the form of a gel liner for lower limb or above the knee amputee prosthesis formed by injection molding, extruding, spinning, casting, or dipping of said gel, wherein said gel comprises at least one said block copolymer of poly(styrene-ethylene-ethylene-propylene-styrene), poly(styrene-ethylene-ethylene-propylene)<sub>n</sub>, poly(styrene-ethylene-ethylene-butylene-styrene), or poly(styrene-ethylene-ethylene-butylene)<sub>n</sub>, or a mixture of two or more of said block copolymers.

The present amendments do not involve new matter or new issues and are not made for reason of any prior art. Since the amendments require no substantial amount of additional work on the part of the Office, consideration and entry is requested by Applicant.

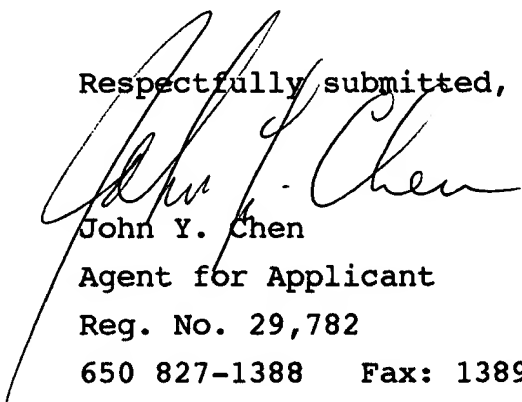
With respect to "RELATED APPLICATIONS" which this application claims benefit of earlier filing dates under 35 USC 120, the continuation data as amended by Applicant on June 14, 1999 are as follows:

This application is a continuation-in-part of the following applications: U.S. Serial No: 08/819,675 filed March 17, 1997; U.S. Serial No: 08/719,817 filed September 30, 1996, U.S. Serial No: 08/665,343 filed June 17, 1996 which is a Continuation-in-part of U.S. Serial No: 612,586 filed March 8, 1996 which is a Continuation-in-part of Serial Nos: PCT/US94/04278 filed 4/19/94 (published 5/26/95 No. WO95/13851); PCT/US94/07314 filed 6/27/94 (published 1/4/96 No. WO 96/00118); 288,690 filed 8/11/94; 581,188 filed 12/29/95; 581,191 filed 12/29/95; 581,125 filed 12/29/95. In turn U.S. Serial Nos. 581,188; 581,191; and 581,125 are continuation-in-parts of the following

applications: Serial Nos.: 288,690, filed August 11, 1994,  
PCT/US94/07314 filed June 27, 1994 (CIP of PCT/US 94/04278, filed 19  
April 1994 which in turn is a CIP of 957,290). The above patents and  
applications are specifically incorporated herein by reference.

Should Examiner have any questions regarding this response,  
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Respectfully submitted,



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